

REMARKS

Claims 1-26, 29-33, 35-37, 39, and 41-45 are pending upon entry of this Amendment C and Response After RCE. Applicants have amended claims 20 and 36. Support for the amendments to claims 20 and 36 can be found in original dependent claims 27, 28 and 38, as well as in the instant specification of the published Application, U.S. 2007/0266503 A1.¹ Claims 27, 28, and 38 have been cancelled. Claims 1-19 remain withdrawn. No new subject matter has been added by this Amendment C and Response After RCE.

Rejection under 35 U.S.C. §102

Reconsideration is requested of the rejection of claims 20 and 36 under 35 U.S.C. §102 as being anticipated by Whitfield, et al., U.S. Patent No. 4,432,834.

Claim 20, as amended herein, is directed to a fibrous nonwoven comprising at least one short fiber-including layer. The short fiber-including layer comprises short viscose fibers having a multi-limbed cross-section, wherein at least a fraction of the short fibers is provided with a finish in an amount of more than 0.035 percent by weight, based on the fiber weight of the short fibers provided with the finish. The finish is selected from the group consisting of imidazolium ethosulfates, methosulfates, and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates and methosulfates.

Whitfield, et al., is directed to a composition for addition to cellulosic fibers prior to felting them into a sheet comprising as component (a) a monomeric water soluble diallyl

¹ U.S. 2007/0266503 A1, paragraphs [0020]-[0021].

dimethyl ammonium halide or homopolymer thereof or mixtures thereof and as component (b) a water dispersible complex fatty amido compound, specifically, 1-stearamidoethyl-1-methyl-2-heptadecyl imidazolinium methosulfate. The proportion of (a) and (b) being sufficient to enhance softness of the dried sheet while increasing or not substantially reducing absorbency of water and tensile strength.² Whitfield, et al., also discloses a dried cellulosic fiber tissue sheet containing an amount of a composition comprising component (a) a monomeric water soluble diallyl dimethyl and b) a water dispersible complex fatty amido compound, specifically, 1-stearamidoethyl-1-methyl-2-heptadecyl imidazolinium methosulfate, the proportion of (a) and (b) to enhance the softness of the dried sheet while increasing or not substantially reducing absorbency of water and tensile strength of the dried sheet as compared with a dried felted cellulosic tissue fiber sheet to which said composition has not been added.³

As stated in M.P.E.P. §2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Significantly, Whitfield, et al., does not teach or suggest a fibrous nonwoven comprising at least one short fiber-including layer comprising viscose short fibers having a multi-limbed cross-section. At best, Whitfield, et al. teaches the addition of a finish to cellulosic fibers. While, the genus of cellulosic fibers includes viscose fibers, as stated in M.P.E.P. §2131.02, a genus does not read on a claim to a species within a genus, unless the species is clearly named or well delineated. No where is there any suggestion in Whitfield, et al. of using

² Whitfield, et al., the Abstract, claim 1, col. 3, ln 14-22, Example 1 and claim 9.

³ Id., the Abstract, claim 9, col. 3, ln 14-22, Examples II-IV and VI.

short viscose fibers as the cellulosic fibers. Furthermore, there is no teaching or suggestion of short viscose fibers having a multi-limbed cross-section.

As Whitfield, et al., fails to teach or suggest each and every limitation of Applicants' amended claim 20, Applicants respectfully submit that the rejection of claim 20 based on this reference should be withdrawn.

Claim 36, as amended, is similar to claim 20 and is directed to a short fiber provided with a finish in an amount of more than 0.035 percent by weight, based on the fiber weight, wherein the short fiber has a multi-limbed cross-section.

As Whitfield, et al., fails to teach or suggest each and every limitation of Applicants' amended claim 36, Applicants respectfully submit that the rejection of claim 36 based on this reference should also be withdrawn.

Rejections under 35 U.S.C. §103

A. Claims 20-26

Reconsideration is requested of the rejection of claims 20-26 under 35 U.S.C. 103(a) as being unpatentable over Scott, Jr. et al., U.S. Patent Application publication 2002/0032421, in view of Whitfield, et al, U.S. Patent NO. 4,432,834, and Shah, U.S. Patent No. 4,575,376.⁴

Claim 20, as amended, is discussed above. Whitfield, et al. is discussed above.

Scott, Jr., et al. is directed to an absorbent airlaid nonwoven fabric comprising short fibers, composed of cotton or

⁴ Applicants respectfully note that U.S. Patent No. 4,573,376 (Correte, Richard H.) encompasses a method of producing thread rolling die as opposed to a method for increasing the absorbency of cellulosic fibers as in Shah, U.S. Patent No. 4,575,376.

rayon (i.e., viscose), that may be bonded together using a binder of thermoplastic fibers. (See Scott, Jr., et al., at page 2, paragraph [0014] and page 3, paragraph [0025]). The short fibers have a length of 0.5-12 mm. (See Scott, Jr., et al., at page 3, paragraph [0025]). In one embodiment, the airlaid fabric may further include superabsorbent materials. (See Scott, Jr., et al., at page 3, paragraph [0029]).

Shah, et al., disclose a process for increasing the absorbency of cellulosic fibers by a high temperature wet treatment comprising heating the fibers in a water bath at temperatures within the range of about 95⁰C to 100⁰C for periods ranging from about one to sixty minutes.⁵ Shah, et al. is further directed to a method for increasing the absorbency of cellulosic fibers by treating said fibers with a finishing agent such as polyoxylethylene sorbitan monoester of a higher fatty acid. (See Shah, et al. at col. 3, lines 33-55).

Recognizing that Scott Jr., et al. and Shah, et al., fail to teach or suggest each and every limitation of Applicants' claim 20, the Office combines Whitfield, et al. with Scott Jr., et al. and Shah, et al. The combination of these cited references fails to overcome the shortcomings of Scott Jr., et al. and Shah, et al. as combined in the previous Office action.

In order for the Office to show a *prima facie* case of obviousness, M.P.E.P. § 2142 requires a clear articulation of the reasons why the claimed invention would have been obvious. Specifically, to reject a claim based on this rationale, the Office must articulate the following: (1) a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to

⁵ Shah, et al, the Abstract.

one of ordinary skill in the art, to modify the references or to combine reference teachings to arrive at each and every limitation of the claimed invention; (2) a finding that there was reasonable expectation of success; and (3) whatever additional findings based on the Graham factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness. The Office has failed to meet its burden under number (1) above, as the cited references, alone or in combination, fail to teach or suggest each and every limitation of Applicants' claimed invention, and further, there is no apparent reason for one skilled in the art to modify and/or combine the references to arrive at each and every limitation. It simply would not have been obvious to one skilled in the art to arrive at Applicants' claimed combinations.

Significantly, as discussed above, Whitfield, et al., fails to teach or suggest a fibrous nonwoven comprising short viscose fibers having a multi-limbed cross-section as required in claim 20. Moreover, none of the cited references, alone or in combination, teach or suggest providing any specific fraction of fibers in a fibrous nonwoven with a finish.

Applicants recognize that prior art is not limited just to the reference being applied, but includes the understanding of one of ordinary skill in the art. The prior art reference need not teach or suggest all of the claim limitations, but in the cases where the reference fails to teach all of the limitations, the Office must explain why the differences between the prior art and the claimed invention would have been obvious to one of ordinary skill. Applicants respectfully submit that the Office cannot make such an explanation for amended claim 20 as there is simply no reason to modify any of the fibers of Whitfield, et

al., Scott Jr., et al., and/or Shah, et al. to provide for the fibrous nonwoven including short viscose fibers having a multi-limbed cross-section as required in amended claim 20.

Particularly, nowhere is there any mention of using viscose fibers having a multi-limbed cross-section. These specific fibers are simply not taught or even recognized as being advantageous. As disclosed in the instant specification at paragraph [0021], multi-limbed cross-section fibers are particularly advantageous when used with the finish required by the claimed invention as these fibers allow for an improved through-put rate during the airlaid method used to produce nonwovens including short fibers.

In view of foregoing, claim 20 is patentable over the cited references, alone and/or in combination. Additionally, claims 21, 23, 24, 26, which depend from claim 20, are patentable over the cited references for the same reasons as set forth above for claim 20, as well as for the additional limitations they require. As aforementioned, claims 22 and 25 have been cancelled.

B. Claims 27-33, 35-39, 41-45

Reconsideration is requested of the rejection of claims 27-33, 35-39, 41-45 under 35 U.S.C. 103(a) as being unpatentable over Scott, Jr. et al., U.S. Patent Application publication 2002/0032421 in view of Whitfield, et al, U.S. Patent NO. 4,432,834 and Shah, U.S. Patent No. 4,575,376 as applied to claims 27-33, 35-39 and 41-45 in view of Agyapong, et al., U.S. Patent No. 6,554,814.

Claim 20 is discussed above. The references Scott, Jr., et al., Whitfield, et al., and Shah, et al., are discussed above.

Agyapong, et al. is directed to catamenial tampons having improved expansion characteristics, and thus, improved leakage protection.

While Agyapong teaches that rayon fibers and trilobal rayon fibers can be used and/or in mixture with short cotton fibers to form absorbent articles⁶ and discloses absorbencies of from less than 6g/g to up to about 15 g/g catamenial devices,⁷ there is simply no reason to combine Agyapong, et al. with the other cited references to arrive at the instant claimed invention.

One skilled in the art simply would not have a reason to combine Agyapong, et al. with the other cited references as Agyapong, et al. is directed to a complete separate and distinct problem as compared to the other cited references. Particularly, Agyapong, et al. is directed to making tampons having improved expansion characteristics. The tampons are generally compressed into a cylindrical configuration in the width direction, the radial direction, the axial direction, or any combination thereof. Nowhere is there any mention of treating these fibers with a finishing agent to improve absorption such as is disclosed in Whitfield, et al. and Shah, et al. In fact, there is no mention of treating the fibers of the tampon of Agyapong, et al. at all. Accordingly, one skilled in the art would simply not look to Agyapong, et al. for possible combination with the Whitfield, et al. and/or Shah, et al. references.

With all due respect, it appears that the Office has merely used hindsight reasoning in combining these references, which has been specifically instructed against by the Federal Circuit.

⁶ Agyapong, et al., col. 7, ln 6-11.

⁷ Id., col. 3, ln 44-46, col. 11, ln 12-16.

There is simply no reason, outside of Applicants' invention itself, to modify the Whitfield, et al., Scott Jr., et al., and Shah, et al. references to add the fibers of Agyapong, et al.

In view of the foregoing, claim 20 is patentable over the cited references, alone and/or in combination. Additionally, claims 27-33 and 35 depend indirectly from claim 20, and are patentable over the cited references for the same reasons as set forth above for claim 20, as well as for the additional limitations they require.

Additionally, as noted above, claim 36 is similar to claim 20. In view of the foregoing, claim 36 is patentable over the cited references, alone and/or in combination, for the same reasons as set forth above for claim 20, as well as for the additional limitations it requires. Additionally, claims 36-38, and 41-45 depend directly or indirectly from claim 36, and are patentable over the cited references for the same reasons as set forth above for claim 36, as well as for the additional limitations they require.

CONCLUSION

In view of the foregoing remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action with respect to all the pending claims is respectfully solicited.

The Commissioner is hereby authorized to charge any fees that may be required in connection with this response to Deposit Account No. 01-2384.

Respectfully Submitted,

/Christopher M. Goff/

Christopher M. Goff, Reg. No. 41,785
ARMSTRONG TEASDALE LLP
7700 Forsyth Blvd., Suite 1800
St. Louis, MO 63105
314-621-5070

CMG/JMB/HVD/sb
Via EFS